

IN THE CLAIMS:

1. (Canceled)
2. (Currently Amended) The humidity sensor as claimed in claim +4, wherein the lower electrode or the upper electrode predominantly contains platinum.
3. (Currently Amended) The humidity sensor as claimed in claim +4, wherein the lower electrode comprises a porous body.
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4. (Currently Amended) A humidity sensor comprising:
an insulating substrate;
a lower electrode, a moisture sensitive layer and an upper electrode successively formed
on the insulating substrate; and
~~The humidity sensor as claimed in claim 1 comprising~~ a heater provided in the insulating substrate,
wherein the lower electrode comprises a noble metal, the upper electrode comprises a
noble metal porous body, and the upper electrode is joined to the moisture sensitive layer and a
portion of the insulating substrate.

5. (Currently Amended) The humidity sensor as claimed in claim 4, comprising a temperature measurement resistor provided in the insulating substrate.

6. (Original) The humidity sensor as claimed in claim 4, wherein the heater is located directly below the moisture sensitive layer.

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7. (Original) The humidity sensor as claimed in claim 5, wherein the temperature measurement resistor is located directly below the moisture sensitive layer.

8. (Currently Amended) A humidity sensor comprising:
an insulating substrate; and
a lower electrode, a moisture sensitive layer and an upper electrode successively formed
on the insulating substrate,
wherein the lower electrode comprises a noble metal, the upper electrode comprises a
noble metal porous body, and the upper electrode is joined to the moisture sensitive layer and a
portion of the insulating substrate, and
wherein the The humidity sensor is as claimed in claim 4, adapted for measuring
humidity in an atmosphere containing a very small amount of oxygen and containing a reducing gas.

9. (Currently Amended) A humidity sensor comprising:

an insulating substrate; and

a lower electrode, a moisture sensitive layer and an upper electrode successively formed
on the insulating substrate,

wherein the lower electrode comprises a noble metal, the upper electrode comprises a
noble metal porous body, and the upper electrode is joined to the moisture sensitive layer and a
portion of the insulating substrate, and

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A humidity sensor according to claim 1, wherein a size of pores in the upper electrode is
0.5-20 μm.

10. (Currently Amended) A humidity sensor comprising:

an insulating substrate; and

a lower electrode, a moisture sensitive layer and an upper electrode successively formed
on the insulating substrate,

wherein the lower electrode comprises a noble metal, the upper electrode comprises a
noble metal porous body, and the upper electrode is joined to the moisture sensitive layer and a
portion of the insulating substrate, and

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~~A humidity sensor according to claim 3,~~ wherein a size of pores in the lower electrode is 0.5-20 μm .

11. (Currently Amended) A humidity sensor according to claim 4 4, wherein a size of pores in the moisture sensitive layer is 0.05-0.2 μm .

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12. (Currently Amended) A humidity sensor comprising:
an insulating substrate; and
a lower electrode, a moisture sensitive layer and an upper electrode successively formed
on the insulating substrate,

wherein the lower electrode comprises a noble metal, the upper electrode comprises a
noble metal porous body, and the upper electrode is joined to the moisture sensitive layer and a
portion of the insulating substrate, and

~~A humidity sensor according to claim 4,~~ wherein particles of ceramic are incorporated in an amount of 1-20 wt% into the upper electrode.

13. (Currently Amended) A humidity sensor comprising:
an insulating substrate; and

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a lower electrode, a moisture sensitive layer and an upper electrode successively formed
on the insulating substrate,

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wherein the lower electrode comprises a noble metal, the upper electrode comprises a
noble metal porous body, and the upper electrode is joined to the moisture sensitive layer and a
portion of the insulating substrate, and

~~A humidity sensor according to claim 1~~, wherein particles of ceramic are incorporated in
an amount of 1-20 wt% into the lower electrode.
